

# Northwest Forest Worker Safety Review



News, research, developments, and coming events compiled by the PACIFIC NORTHWEST AGRICULTURAL SAFETY AND HEALTH

Issue 10

June 2011

## After the recession...Accidents?

Dr. John J. Garland, PE  
Consulting Forest Engineer,  
Affiliate Professor, Department of Environmental and  
Health Sciences, University of Washington

Like most firms, logging contractors reduce employment during the recession and expand as the opportunities allow. In time, the current deep recession in the forestry sector will lessen and more logging employees will be hired in the western states. Trends from the previous deep recession of 1980-81 raise concerns for how accidents may increase as logging firms add new and inexperienced employees.

In 1982 Oregon logging accidents reached a low point then rose quickly as the recovery continued. It took six years for the accident levels to return to pre-recession levels, then during the next four years 4,290 loggers were injured. The number of accidents went up 67% and the accident rate rose 30% even as more workers were hired. The average cost of accidents during that period was around \$13,000 and the industry took a \$64 million dollar hit to the Workers' Compensation system. Oregon's accidents now cost around \$80,000

on average. If only 2,000 loggers are injured in the recovery, \$160 million will be needed for the accidents. These costs do not include costs to the firm for lost production, hiring and training new workers, and lost opportunities from lacking a complete and experienced crew. Data from the past show that not only new, inexperienced workers were injured, but significantly, experienced workers from the core workforce were also injured. Data on logging from other western states typically follows a similar pattern.

Armed with this knowledge and potential for problems, logging firms and organizations might consider improved training for new employees, improved hiring practices, and greater direct supervision of new employees. Those providing logging training will need additional support from their employers and others to help avoid injuries. There are not enough experienced and skilled loggers in the west to lose them to injuries coming out of the recession.

*"The number of accidents went up 67% and the accident rate went up 30%."*

**Ongoing PNASH-Funded Small Grants Focusing on Workers in the Woods:** Reducing workloads for older loggers in physically demanding logging tasks with synthetic rope



Timber harvesting (logging) starts the production cycle of forest products and has been characterized as difficult, dangerous and dirty. In the US, logging is among the top three most dangerous jobs and when all factors are considered, it is likely the most dangerous job. Early research characterizes and rates logging

PNASH funded small grants continued...

work-load among the most exertive work. Data in OR, WA, and ID show loggers at least 45 years old represent ~50% of the workforce and that percentage is growing. Other states and countries show similar trends. Current NIOSH Forestry Sector Nation Occupational Research Agenda goals emphasize the workload issues and impacts that logging's aging workforce is facing. This project is working to establish a Forestry Sector Partnership to outline research methodologies and develop new technologies (e.g. synthetic rope, "smart" clothing) to reduce workloads and injury risks associated with logging and forest operations; Reduce negative health and safety outcomes for older workers; and implement strategies to minimize the frequency and causes of work-related musculoskeletal diseases (MSDs) and other acute and chronic illnesses leading to premature disability.

Our primary strategy is to test field test the adoption of synthetic rope. This rope weighs one ninth that of similar strength wire rope. Prior research has documented potential gains for younger forest workers but older forest workers stand to gain the most from ergonomic improvements using synthetic rope. The project will assess the ergonomic and economic benefits of using synthetic rope to replace wire rope in standardized logging tasks for older workers (>age 40) compared to current practices and younger workers (prior research). The project will show the next generation of forest operations researchers that heart rate measures can contribute to research on improvement efforts.

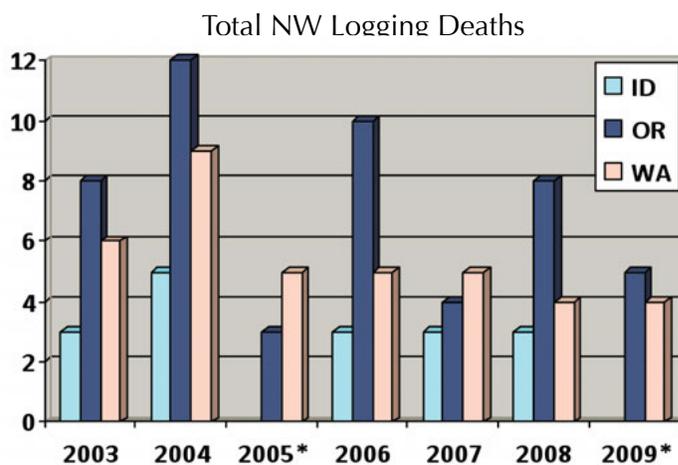
*For an opportunity to participate in the research or for more information, contact John Garland at 541-231-6241 or garland49@q.com*

### Forest Workers Safety and Health

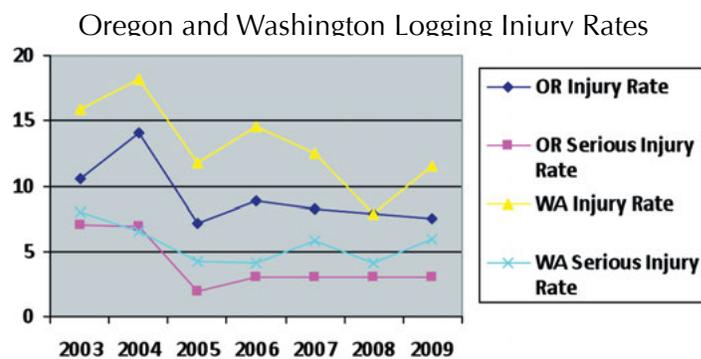
Although forest services work is very dangerous, occupational injuries and illnesses among the workers who perform this work has rarely been studied. The Alliance of Forest Workers and Harvesters, the Labor Occupational Health Program at the University of California, Berkeley, and Lomakatsi Restoration Project are to conducting a small community-based participatory research project to document occupational injuries and illnesses and related medical treatment among immigrant, Spanish-speaking forest workers in southern Oregon. This project will inform the development of a job health and safety promotora program for these workers. We will recruit and train promotores to collaborate as equal partners in conducting a sample survey among forest services workers. The goals of the study are to 1) inform the development of an education "Research to Practice" (R2P) program, applying a "promotora" (lay educator) model to the forestry sector; 2) collect baseline data on work-related injuries and illnesses and related forest worker needs with regard to preventing and caring for occupational injuries and illnesses; 3) use the findings of

this study and the related PHP project to develop a full study proposal to rigorously evaluate the viability and effectiveness in terms of translating evidence-based best practices and promoting adoption of potential practices. These goals are consistent with the PNASH Center goals of identifying and addressing hazards, and promoting safety and health in agriculture, forestry and fishing. In addition, this project helps address two of the overarching goals of the NIOSH National Agriculture, Forestry, and Fishing Agenda, focusing on some of the most vulnerable workers in the forestry industry and on partnerships between university and community resources.

### NW Injury and Fatality Report



Source: BLS \* 2005, 2009: No data for Idaho



Source: BLS

During 2009 logging deaths and injuries in Washington and Oregon remained lower than their respective averages during the first half of this decade. When viewing these numbers it is also important to keep in mind that the logging workforce in Oregon (~6,800 in 2008) is fifty percent larger than the logging workforce in Washington (~4,500 in 2008).

## Logging Safety Resources

**\*NEW\***

**Water. Rest. Shade.**

**The work can't get done without them.**

OSHA's nationwide outreach campaign to raise awareness among workers and employers about the hazards of working outdoors in hot weather. This website contains training tools for employers to use and posters to display at their worksites.

<http://www.osha.gov/SLTC/heatillness/index.html>

- ♦ **Amerisafe Logging Safety Tips**  
[www.amerisafe.com/safety/tipofthemonth.html](http://www.amerisafe.com/safety/tipofthemonth.html)
- ♦ **Associated Contract Loggers**  
[www.idahologgers.com/links.html](http://www.idahologgers.com/links.html)
- ♦ **Field Guide for Danger Tree Identification and Response** <ftp://ftp2.fs.fed.us/incoming/r6/ro/toupin/DangerTree04052010/FieldGuide2008.pdf>
- ♦ **Forestry Safety Topic Centre, British Columbia Workers' Compensation Board (BCWCB)**. [www2.worksafebc.com/Safety/Home.asp](http://www2.worksafebc.com/Safety/Home.asp)
- ♦ **Logging Hazard Training Cards and Glossary of Terms** [www.depts.washington.edu/pnash/ORforest\\_training.php](http://www.depts.washington.edu/pnash/ORforest_training.php)
- ♦ **Logging Safety Recognition, Control, and Standards** OSHA [www.osha-slc.gov/SLTC/logging/index.html](http://www.osha-slc.gov/SLTC/logging/index.html)
- ♦ **Logging Safety Research, NIOSH**  
[www.cdc.gov](http://www.cdc.gov), [www.loggingsafety.com](http://www.loggingsafety.com)
- ♦ **Occupational Safety and Health Association (OSHA) logging e-tool**  
[www.osha.gov/SLTC/etools/logging/mainpage.html](http://www.osha.gov/SLTC/etools/logging/mainpage.html)
- ♦ **Oregon OSHA** [www.orosha.org/](http://www.orosha.org/)
- ♦ **U.S. Forest Service [and WA state agencies and associations] 2006, Guidelines for Selecting Reserve Trees** [www.lni.wa.gov/FormPub/Detail.asp?DocID=1755](http://www.lni.wa.gov/FormPub/Detail.asp?DocID=1755)

## 2010 Northwest Logging and Forestry Safety Events

September 21 & 22

### Central Oregon Occupational Safety & Health Conference

Eagle Crest Resort Conference Center Redmond, Oregon, [www.orosha.org/conferences/OSHA\\_conference/cntrl\\_or\\_occ\\_sfty\\_hl.html](http://www.orosha.org/conferences/OSHA_conference/cntrl_or_occ_sfty_hl.html)

September 28 & 29

### 60th Annual Governor's Industrial Safety and Health Conference

Greater Tacoma Convention & Trade Center, Tacoma, WA. [www.wagovconf.org/](http://www.wagovconf.org/), (888) 451-2004

October 18 & 20

### Southern Oregon Occupational Safety & Health Conference

Smullin Education Center - Medford, Oregon. [www.orosha.org/conferences/OSHA\\_conference/sthrn\\_or\\_occ\\_sfty\\_hl.html](http://www.orosha.org/conferences/OSHA_conference/sthrn_or_occ_sfty_hl.html) (503) 378-3272

November 4-7

### 2010 Pacific Logging Congress "Live-In-The Woods" Show

The Fairmont Kea Lani ~ Wailea, Maui (425) 413-2808. [www.pacificloggingcongress.org/](http://www.pacificloggingcongress.org/)

Note: Logging courses are also offered to members of state contract logging associations. Please contact your association for more information.



## Northwest Forest Worker Safety Review

is produced by PNASH at the University of Washington's School of Public Health. PNASH conducts research, develops interventions, and provides professional education and outreach to improve occupational safety and health. We serve workers in farming, fishing and forestry in WA, OR, AK, and ID.

**To add names to our distribution list, suggest ideas for future issues, or list events, contact Marcy Harrington at (206) 685-8962, (800) 330-0827, or [marcyw@uw.edu](mailto:marcyw@uw.edu).**

**Producers:** Robin Russell, Editor  
Stacey Holland, Designer

**Contributor:** John J. Garland, PE, Affiliate Professor, UW



PNASH is funded through  
CDC/NIOSH (Awarded # 2U50OH07544)  
and the State of Washington.

